

## Attachment H

## COVER SHEET (PAGE 1 of 2)

## May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: Water Diversion Screening, Grizzly Island Wildlife Area  
 Applicant Name: California Department of Fish and Game  
 Mailing Address: 1416 Ninth Street, Sacramento, CA 95814  
 Telephone: Dennis R. Becker (707) 425-3828  
 Fax: (707) 425-1403

Amount of funding requested: \$ 1,511,300 for two years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page \_\_\_ of the Proposal Solicitation Package for more information.

- |   |   |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment  | <input checked="" type="checkbox"/> Fish Passage Improvements |
| <input type="checkbox"/> Floodplain and Habitat Restoration                               | <input type="checkbox"/> Gravel Restoration                   |
| <input type="checkbox"/> Fish Harvest   | <input type="checkbox"/> Species Life History Studies         |
| <input type="checkbox"/> Watershed Planning/Implementation                                | <input type="checkbox"/> Education                            |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities |   |

Indicate the geographic area of your proposal (check only one box):

- |   |   |
|---|---|
| <input type="checkbox"/> Sacramento River Mainstem              | <input type="checkbox"/> Sacramento Tributary: _____      |
| <input type="checkbox"/> Delta                                  | <input type="checkbox"/> East Side Delta Tributary: _____ |
| <input checked="" type="checkbox"/> Suisun Marsh and Bay        | <input type="checkbox"/> San Joaquin Tributary: _____     |
| <input type="checkbox"/> San Joaquin River Mainstem             | <input type="checkbox"/> Other: _____                     |
| <input type="checkbox"/> Landscape (entire Bay-Delta watershed) | <input type="checkbox"/> North Bay: _____                 |

Indicate the primary species which the proposal addresses (check no more than two boxes):

- |  |  |
|--|--|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon |  |
| <input checked="" type="checkbox"/> Winter-run chinook salmon                                | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon  | <input type="checkbox"/> Fall-run chinook salmon   |
| <input checked="" type="checkbox"/> Delta smelt  | <input type="checkbox"/> Longfin smelt             |
| <input type="checkbox"/> Splittail   | <input type="checkbox"/> Steelhead trout           |
| <input type="checkbox"/> Green sturgeon  | <input type="checkbox"/> Striped bass              |
| <input type="checkbox"/> Migratory birds   |  |

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Indicate the type of applicant (check only one box):

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> State agency         | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit     |
| <input type="checkbox"/> Local government/district       | <input type="checkbox"/> Private party  |
| <input type="checkbox"/> University                      | <input type="checkbox"/> Other: _____   |

Indicate the type of project (check only one box):

- |                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/> Planning   | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education                 |
| <input type="checkbox"/> Research   |  |

By signing below, the applicant declares the following:

- (1) the truthfulness of all representations in their proposal;
- (2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and
- (3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Dennis R. Becker for

(Signature of Applicant)

Brian Hunter  
Regional Manager

**CAL FED**  
**CATEGORY III**

**EXECUTIVE SUMMARY**

**Title:** Water Diversion Screening

**Applicant:** California Department of Fish and Game  
1416 Ninth Street  
Sacramento, California 95814

**Project Description and Primary Biological/Ecological Objectives:**

The California Department of Fish and Game (DFG) requests funds to design one fish screen and install four fish screens on Montezuma Slough in the Suisun Marsh. The screens will be constructed using the latest in fish screen technology and will meet the criteria established by the DFG and the National Marine Fisheries Service (NMFS) for screen structure and placement. This project is on the Department's Grizzly Island Wildlife Area.

Implementation of this proposal will result in reduced entrainment losses at water diversions of special status species, juvenile salmonids and other anadromous and resident fish species.

**Project Approach and Schedule:**

The DFG has identified water diversions that are considered to be high priority for screening. The DFG will assist in design, selecting subcontractors and in monitoring efficiency. All necessary environmental documents would be prepared and required permits obtained during the planning process.

**Project Justification:**

The CALFED Bay-Delta Program has identified fish entrainment from unscreened or inadequately screened water diversions as a major stressor contributing to the decline of priority fish species. The proposed project would reduce entrainment and provide working examples of fish screen installations to promote future projects.

In addition, the screens would give DFG the flexibility to appropriately manage seasonal wetlands that provide habitat to a variety of wetland wildlife. Waterfowl, shorebirds, herons, egrets, river otters, mink, various raptors and other wildlife benefit from this wetland management.

**Budget Costs and Third Party Impacts:**

The DFG is requesting \$1,511,300 to fund the entire project. The DFG will maintain and operate the screens.

**Applicant Qualifications:**

The DFG has been actively constructing and maintaining fish screens since the early 1950s. The DFG has three screen shops that operate over 100 fish screens of various sizes and configurations. DFG personnel at these installations are skilled in all phases of fish screen construction and maintenance. DFG personnel have remained current with the latest screen technology through training courses and the establishment of a statewide fish screen committee.

**Project Evaluation:**

The efficiency of the fish screens will be inspected for compliance with current DFG and NMFS fish screen criteria. A final project report will be prepared and submitted upon completion of all the project tasks.

**Local support and Coordination with Other Programs:**

There are hundreds of unscreened water diversions in the Ecosystem Restoration Program Plan (ERPP) study area. Local, State and Federal agencies as well as private landowners and water users are becoming increasingly aware of the need to reduce entrainment of fish in water diversions. This is particularly true with the increasing number of fish species being listed under State and Federal endangered species acts. It is important that the DFG take a leading role in screening priority water diversions as well as providing examples of the latest in fish screen technology for other programs to follow.

**FISH PASSAGE AND RELATED SCREEN IMPROVEMENTS  
WATER DIVERSION SCREENING**

**Applicant:** Department of Fish and Game  
1416 Ninth Street  
Sacramento, California 95814

**Type of Organization:** State Agency

**Tax Identification Number:** 94-6001347

**Technical and Financial Contact Person:**

Mr. Dennis R. Becker  
Grizzly Island Wildlife Area  
2548 Grizzly Island Road  
Suisun, California 94585-9539  
(707) 425-3828

**Participants/Collaborators in Implementation:**

Permitting agencies, construction contractors, and DFG personnel will be involved in this project.

**RFP Project Group Type:**

Group 1 - Construction

## **FISH SCREENS AT GRIZZLY ISLAND WILDLIFE AREA ON MONTEZUMA SLOUGH**

### **Project Description and Approach**

This proposal is for the funding of four conical fish screens on Montezuma Slough at the Grizzly Island unit. Design drawings and all information needed to construct three of these screens were completed under a DFG contract completed in January, 1998. Engineering, design drawings and cost estimates for the fourth screen are a part of this proposal. The four screens will screen water for approximately 450 acres of seasonal wetlands and 150 acres of associated uplands.

The conical fish screen design has been used in the Suisun Marsh. Currently there are five in place on private lands sponsored by the Suisun Resource Conservation District. The Department of Water Resources is also using this design. The installation includes pilings for the screen, a headwall on the levee and a platform to store the screen when it is not in service. A computer system is used for opening and closing the control gate and monitoring the operation of the screen.

Montezuma Slough is designated as critical habitat for the listed delta smelt and winter-run chinook. Other fish species will also benefit from this project including Sacramento splittail, spring- and fall-run chinook salmon and striped bass. Screening will eliminate loss of these fish species through the diversions. In addition, migratory birds will benefit as screening will allow the DFG to flood, leach and drain the seasonal wetlands as needed to produce important winter habitat. Currently unscreened diversions have restrictions at certain times of the year.

### **Project Area**

Grizzly Island Wildlife Area, Suisun Marsh, Solano County.

### **Proposed Scope of Work**

The proposed project would include engineering and design of one fish screen at a cost of \$15,000 and installation of four conical screens for a total of \$1,255,000. DFG overhead at 19% is \$241,300 for a total project request of \$1,511,300 from CALFED.

### **Expected Benefits**

The projects would reduce mortality of fish due to entrainment in unscreened or inadequately screened diversions in the EERP study area. These fish include species listed or being considered for listing under State and Federal endangered species acts. Economic benefits are expected since reduced juvenile losses would increase fish populations available to sport and commercial anglers. There will be increased reliability of water supply by reducing the risk of incidental "take" of listed species in water diversions. Increased public support for fish screening can be expected with the demonstration of working screens.

## **Background and Biological Justification**

Losses of young fish to unscreened or inadequately screened water diversions have been identified as a major stressor contributing to the decline of the priority species and habitats. Mortality at water diversions can occur through injury, impingement, entrainment and increased vulnerability to predation. Listed species are delta smelt and winter-run salmon. Candidate and others to benefit are splittail and striped bass.

Entrainment is the most significant stressor associated with unscreened diversions. From the source tributaries to the Delta, water diversions entrain millions of fish and other aquatic organisms from their source water bodies. Entrained fishes generally do not survive and are permanently removed from the source water. The DFG has long recognized the importance of screening water diversions and has installed numerous fish screen throughout California.

By screening diversions on Grizzly Island DFG will be able to continue managing the seasonal wetlands to benefit wintering waterfowl and other wildlife. Currently, without screens, there are restrictions on diversions that impact seasonal wetland management. Other wildlife that will benefit from enhanced seasonal wetlands include shorebirds, herons, egrets, river otters, mink and muskrats.

Objectives of the ERPP that this project addresses include the following from Program Goals and Objectives, Programmatic EIS/EIR, Technical Appendix, March 1998.

### Ecosystem Quality Objectives

- A. Improve and Increase Aquatic Habitats
  - 7. Improve Productivity of Bay-Delta Aquatic Habitat Food Web
    - a. Reduce Entrainment (Page A-10)
- B. Improve and Increase Important Wetland Habitats
  - 5. Increase the Amount of Wintering Wildlife Habitat
    - c. Increase brackish water Foraging Areas for wintering wildlife (Page A-12)
- C. Increase Population Health and Population Size of Delta Species (Page A-13)

## **Monitoring and Data Evaluation**

Screen installations will be inspected to make sure they are built to design specifications and meet DFG and NMFS screen criteria. The mechanical effectiveness of the screen cleaning system will be monitored. Approach and sweeping velocities will be measured in front of the screen face. An appropriate maintenance program will be established which will be reviewed on a regular basis.

## **Implementability**

Fish screen technology has been developed that will be used to place screens on the water diversions identified in this proposal that will be durable and not restrict the diversion flow. Permits required for the installation of fish screens will be prepared.

## **Budget Costs**

### **Task 1 - Engineering and Design of One Screen**

|                              |                        |                      |
|------------------------------|------------------------|----------------------|
| <u>DFG Labor Contributed</u> | <u>Design Contract</u> | <u>DFG Overhead*</u> |
| \$1,000                      | \$15,000               | \$2,850              |

### **Task 2 - Construction of Four Screens**

|                              |                        |                      |
|------------------------------|------------------------|----------------------|
| <u>DFG Labor Contributed</u> | <u>Design Contract</u> | <u>DFG Overhead*</u> |
| \$4,000                      | \$1,255,000            | \$238,450            |

### **Task 3 - Monitoring**

|                              |
|------------------------------|
| <u>DFG Labor Contributed</u> |
| \$8,000                      |

|  |
|--|
| Total DFG labor<br>contributed as cost share |
| \$13,000                                     |

|                                   |
|-----------------------------------|
| <u>Total Category III Request</u> |
| \$1,511,300                       |

\*DFG overhead at 19%

The Department currently has a contract with the Suisun Resource Conservation District (SRCD) for other work in the Suisun Marsh. It is anticipated that DFG will retain SRCD as a subcontractor for this screen construction. SRCD has managed screen design and construction at several sites in the Suisun Marsh. There should be no additional CALFED costs with this subcontractor.

## **Schedule Milestones**

If funding is secured, planning for fish screen installation will begin immediately. Permits will be obtained within three months. Installation of fish screens will be done as soon as construction contracts can be completed and water conditions and irrigation schedules allow for construction. Construction of the screens will be completed within two years of funding approval.



### **Applicant Qualifications**

The DFG has been actively constructing and maintaining fish screens since the early 1950s. The DFG has three screen shops that operate over 100 fish screens of various sizes and configurations. DFG personnel at these installations are skilled in all phases of fish screen construction and maintenance. DFG personnel have remained current with the latest screen technology through training courses and the establishment of a statewide fish screen committee. The planning and supervision of these fish screen projects will be done by DFG personnel with appropriate knowledge and skills.

### **Standard Terms and Conditions**

Interagency Agreement standard clauses and the Nondiscrimination Compliance Statement are attached.

Agreement No. \_\_\_\_\_

Exhibit \_\_\_\_\_

**STANDARD CLAUSES -  
INTERAGENCY AGREEMENTS**

**Audit Clause.** For contracts in excess of \$10,000, the contracting parties shall be subject to the examination and audit of the State Auditor for a period of three years after final payment under the contract (Government Code Section 8546.7).

**Availability of Funds.** Work to be performed under this contract is subject to availability of Category III funds.

**Interagency Payment Clause.** For services provided under this agreement, charges will be computed in accordance with State Administrative Manual Section 8752 and 8752.1.

**Termination Clause.** Either State agency may terminate this contract upon 30 days advance written notice. The State agency providing the services shall be reimbursed for all reasonable expenses incurred up to the date of termination.

## NONDISCRIMINATION COMPLIANCE STATEMENT

COMPANY NAME

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

## CERTIFICATION

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME

DATE EXECUTED

EXECUTED IN THE COUNTY OF

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME